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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,060	07/01/2002	Mattias Hellgren	P67724US0	2636
136	7590	03/26/2004	EXAMINER	
JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004			A, MINH D	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/089,060	HELLGREN ET AL.	
	Examiner	Art Unit	
	Minh D A	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2,4-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-2, 4, 7-8, 19-11, 14-15 are rejected under 35 U.S.C. 102(e) as being unpatentable by Thursby et al (US 6,489,925).

Regarding claim 1, Thursby discloses an antenna comprising:
a ground plane means (16) arranged to be connected to ground of a circuitry of a radio communication device, a conductive radiating structure (12 and 14) arranged to be separated from said ground plane means (16) and having a first end and a second end said conductive radiating structure has a total length of $\lambda/4$ - λ at a frequency in the frequency band to be received and/or transmitted by the antenna (electrically bridge can adjustable lengths), said conductive radiating structure is formed as at least a first

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elongated open loop, the first end is arranged to be connected to ground of said radio communication device, and a feed portion is arranged in vicinity of the first and/or second ends. See figures, 1-18, col.4, lines 20-67 to col.12, lines 1-56.

Regarding claim 2, Thursby discloses the antenna means according to claim wherein said second end is a feed portion. See figures 3a-3b, col.5, lines 55-67 to col.6, lines 1-20.

Regarding claim 4, Thursby discloses a conductive radiating structure is a flexible attached to a dielectric substrate (24). See figure 2.

Regarding claim 7, Thursby discloses the conductive radiating structure is meander shaped. See figures 1-18.

Regarding claim 8, Thursby discloses matching (20) for tuning/matching to one or multiple frequencies. See figure 5.

Regarding claim 9, Thursby discloses matching means is an electrical conductor having a first end and a second end, where said first end being arranged to said at least one elongated open loop, said second end being a free end and at least a part of at least one side of said conductor is being capacitively coupled said at least one elongated open loop. See claim 22 of reference.

Regarding claim 10, Thursby discloses an electrical conductor is meander shaped. See figure 5.

Regarding claim 11, Thursby discloses the antenna means further comprises at least one bridge (18) each connected to different parts of said at least one elongated open loop. See col.4, lines 34-63.

Regarding claim 14, Thursby discloses the bridge connector (18) is meander shaped. See figures 1-18.

Regarding claim 15, Thursby discloses an antenna means according to claim wherein the first end of the conductive radiating structure (14) is coupled to ground. See figures 1-18.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-6, 12-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Thursby et al (US 6,489,925).

Regarding claims 5-6, Thursby discloses the claimed invention except for angle is being in the range of 30-150 degrees or C-shapes. It would have been an obvious matter of design choice to employ the angle is being in the range of 30-150 degrees or C-shapes, since applicant has not disclosed that the angle is being in the range of 30-150 degrees or C-shapes solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with angle is being in the range of 30-150 degrees or C-shapes.

Regarding claims 12-13 and 16, Thursby discloses the claimed invention except for

inductive or GPS. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ for inductive or GPS , since it has since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ying. (US 6,329,962) and Takei et al. (US 5,914,693) are cited to show an antenna.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

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Examiner

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Don Wong
Supervisory Patent Examiner
Technology Center 2807